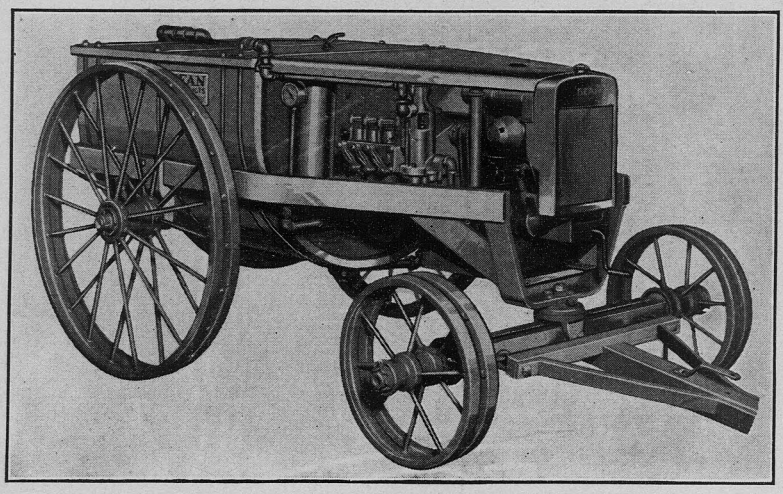
The Maryland Fruit Grower

June, 1933

Maryland State
Horticultural Society

A New Line of "ROYAL" SPRAYERS



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Maryland ◆ Fruit ◆ Grower

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MY EXPERIENCE IN SOIL MANAGEMENT OF A MATURE APPLE ORCHARD

GEO. W. COCHRAN

The competition today makes the fruit-growing industry one in which each phase of it must not only bear its own share of expense but must contribute a given amount to the so-called net income. My point is that to sell well will not necessarily take care of losses of poor management in growing. Therefore a soil management for a bearing orchard in which the tree produces a paying crop at a cost that will allow a return to the grower and will leave the soil in a condition little worse off than it was when the orchard was planted seems best. The day is past when that orchard which bears some fruit each year, and occasionally a crop, can be permitted to have a place on a farm as a commercial venture. Indeed, with the present reduction of bearing apple trees, and at the same time the increase in apples, is proof enough that the trees are producing more fruit per tree than ever before. They must continue to function in this manner if the grower is to remain in the business.

There are fixed costs such as pruning, spraying and cultivating that will change very little whether there is a half crop or a full crop. When one cuts a limb off he can see that he has done something. It is not quite as easy for him to see the immediate effect of a spray or why the soil is cultivated. To him commercial fertilizer is wasted in the soil. When he cultivates and takes no crop off, but rather turns under a good crop of clover which might have returned an income, it is heart-breaking.

The bearing tree can manufacture wood and fruits only when the raw materials are present in the proper amount and when the tree is in a condition to use these materials. If we except the disease that actually attack the tree, then the source of nearly all the trouble will be found beneath the surface of the soil. The trouble here will be found in one of several causes or a combination of them.

The physical condition of the soil is more often at fault than is the chemical. A soil may respond more quickly to a treatment which may change its physical nature rather than the mere adding of a commercial fertilizer. We should have a soil that is potentially good, even though it is poor, for such a soil can be built up.

In places where we must depend on rainfall for our moisture we soon find that the lack of water is our limiting factor more often than any other one cause. Even though enough water fell to produce a crop of apples, the run-off and the amount evaporated reduces the possible amount available

for trees. This amount reaches as much as 20 to 30 per cent of the rainfall.

Then again, in parts of the United States, we get our heavy rains during the time when the tree actually needs little water and can use but a small amount. Therefore, the benefit derived from these rains which fall during the dormant season must come from the amount of water that is taken up and held in the soil. Indeed, here many of our soils are such that if we do not get water for the orchard in the way of subsoil moisture, we cannot produce a crop of apples. I mean to say that during the months when the apple needs the water the rainfall is too light.

Soil management finally settles itself to a consideration of that method which will give the largest returns at the least expense with the least amount of effort. If a system in which cultivation with a cover crop is best, then competition will finally compel the grower to follow that method. On the other hand, if some form of sod mulch is best, then that will eventually come. Each system has its advocates, each has its good points as well as weak ones, and it might be that each can be practiced successfully in some places on some soils. Neither is advisable in all places under all conditions. There is a tendency today to grow varieties of apples that will bear commercial crops early in the life of the tree, and to plant so that for a number of years paying returns will be secured without a long wait, as in days gone by. Few young men will plant varieties requiring fifteen years before commercial production starts. Indeed, most of us live with a reserve so small that we cannot see our way clear to wait ten years for paying returns unless the orchard happens to be a side line with us.

The tendency to get returns early is shown by the desire to grow intercrops, either using annual crops or other apple trees that are early bearing or to use peaches between the apple trees. Even in a climate where peach growing is successful, peach trees should never be used as a filler. I say this after two years' experience with 6,000 peach trees scattered through an apple orchard. If the peach orchard is to carry the young apple orchard, then put each separate, and give each the care that it needs.

Another point that I feel I should call attention to is the fact that at one time peanuts sold themselves. Now they must be sold. Fruit such as the apple at one time sold readily. That was before the orange and the banana became so popular, not because they are better than before, but because they have been so well advertised that they are sold in preference to apples. Every man and woman here should eat a piece of apple pie for his next meal and comment on its good qualities if he can conscientiously do so.

Too many farmers use oleo, canned milk, and pineapples, instead of the products of the farm. If you do not believe in your own products how do you expect to get others to believe in them? In the change from the farm orchard to the strictly commercial orchard is found one of the extremely difficult adjustments for our older fruit growers.

The saying that an apple is an apple no longer holds true. It must be a Delicious, a Grimes, a Jonathan, or a Winesap. What is to become of those big old apple trees that bear occasionally some Bellflowers, Rambo, Russet, and other kinds that the present generation know nothing about? These trees are monuments of the past, but in our present scheme of fruit growing it will be necessary for them to find a place as a back log in the fireplace or manufactured into articles of furniture. They are a liability when we consider the cost of picking and spraying.

It is hardly a question any more whether we should cut them down or work them over by grafting. I feel in most cases they should be allowed to stand if they are giving some return above the cost, and if the toll which they are taking by causing more disease and insects is not too great. The smaller tree, lower and better built with a larger productive area is taking their place. The orchard trees of the future must bear earlier, nearer the ground, and all over the tree, rather than on the outside edge of the tree. We must harvest our fruit from the tree and not gather it from the ground as in days gone by.

The Americans are a wasteful race, caring little for the future of their present holdings. For this reason a good fruit soil is sometimes mined and the wealth that nature placed there is really sold when we think we are selling a manufactured product. Much of the total land is not suitable for fruit growing, yet there is enough good land, even though it is handled wastefully, to provide fruit for many years to come. This does not justify the tiller of the soil to take out of it all that he can get with the least cost and effort and then sell out and move on.

I wish the day might come when horticulture might be so attractive and sufficiently remunerative that those thus engaged will feel proud of their profession, as does the highly trained surgeon.

Of the factors that go to make success in any horticultural endeavor, those making the chances of loss least or the possibility of gain more likely are the ones that must be emphasized, such as a good site, freedom from frost, storms and winter freezings; desirable varieties that bear good crops of good fruit each year; a soil where water will enter and be retained for the tree during the dry, hot summer days, and in which a deep, wide root system will develop.

From Report of Kansas State Horticultural Society—1932.

THINK THIS OVER

In these times of inflation, perspiration, deflation and what not, a dollar, to the farmer and fruit grower, is a dollar—or is it?

We are in the fruit growing business for three reasons:—First, we like it; second, we are growing a food product; third, it is all or part of our livelihood. If we like to grow fruit and feel that we are growing a food product, then we want to grow as nice a product as possible. If we want to make money, only, then we are willing to do anything to make the crop pay every dollar possible.

This brings up the old question of selling culls to truckmen. Many growers feel that there should be a standard set up, prohibiting sale of fruit that is dirty, or that has over a certain percent of its surface blemished or rotted so that it is not an economical food to be bought or sold. At any rate, there's the situation. Some culls and off-grades will be grown, no matter how carefully the orchard is handled. Truckmen are ready to buy this fruit. Growers are divided in opinion as to what to do about selling it.

Both sides of the truck—cull pile or off-grade fruit problem have been discussed in the Maryland Fruit Grower from time to time and now we reprint some further remarks on this important subject:

WASHINGTON GROWERS TAKE A DECIDED STEP

Washington State Horticultural Association at its annual convention at Wenatchee this Winter took a decided stand. For thirty years, they said, the goal of the Northwest apple industry has been INCREASED production of apples. In the face of changed conditions and exorbitant transportation costs, the time has come to change this policy. Henceforth the efforts of the Association will be directed toward REDUCING production, to a point where it may be marketed with profit. A permanent committee was appointed to work to this end. This is in line with their stoppage of marketing low-grade fruit in boxes last year.

With such examples as this in front of us, will we Eastern growers continue to sell for a couple of dollars great piles of poor apples to irresponsible, market-breaking, fly-by-night truckers? Or shall we join, before it is too late, in seeing that some character is maintained in apples marketed direct to the public?

YOU know or can find out whether the trucker is going to face up the pile of culls, or drops, or fall-off he bought from you, to defraud some housewife or merchants, to the injury of future apple sales of your packed, good stock.

LET THE OFFAL GO TO WASTE! Make the trucker respectable fruit to market honorably—or send him away. Because some other growers may connive at fraud in palming off such stuff on the public; that doesn't justify YOU in doing it.

From The Mountaineer Grower, News Letter of the West Virginia Horticultural Society, May, 1933.

SELLING TO THE TRUCKER

C. FRANK GILLAN, St. Thomas, Pa.

It is nine years ago that a group of us organized a Co-op on the Lincoln Highway midway between Philadelphia and Pittsburgh with no other purpose in mind but selling to anybody who came along. The trucking end of this business has developed largely since that time. The trucker who comes along is the itinerant man who comes by night or day and if he can make a profit on the load he will be back tomorrow. He is the man I am interested in.

Our production of apples and peaches will run about 100 cars a year. These past two seasons we did not run that much; we had some drought. We are growing 10 to 25 per cent culls. I kept records at the Cooperative and to my surprise, after we had sorted out the No. ones, the bushels we sent to the canners and to the cull pile and cider mill averaged from the different varieties from 10 to 25 per cent, and when we were done the whole average was about 18 per cent culls. This sounds high but it is true.

We are interested in that 18 per cent and always will be. I will speak of one year back—1931. If it had not been for the sale of culls to the trucker we would have been much more in the red than we were.

Who is this trucker? I commented to a number of people this fall that I hardly knew a person who drove up to our packing house. It was not the local fellow at all. These truckers come from points as far as Binghampton and Pittsburgh. He goes as far as Florida and the Carolinas. This fellow to us has been a storekeeper, a coal dealer, a farmer, laborer and any other occu-

pation in the country to the north and west with a truck out of which he thought he could make some money.

Those fellows are cash buyers in which we are all interested and our experience has been that they pay their bills. Sometimes their checks came back but they finally paid them without protest fees and law suits. We need those fellows.

I do not believe that Gillan Brothers will ever produce all the fruit that is needed even with the help we get from the college. This fellow has gone into markets that we were never able to reach before. He hits any kind of a town. We used to speak of wider distribution. We have it now within 200 miles and can touch every town.

These fellows usually will buy from us all the culls or No. 2 grades. In 1931 we could not get them to buy anything but the large size or as one fellow put it, "I do not care how rotten they are just so they are big", and he bought that kind of stuff. We have a place where we dump our culls and those fellaws keep that cleaned out. In comparison, in 1923 we had 2000 bushels of culls at one time standing on our packing house floor and we finally trucked the 2000 bushels to the stone pile because there was no market for them. In 1931 when peaches grew on fence rails we took none of ours to the stone pile. The trucker took them away. We could not put that fruit on the market and get away with it. The cost is too great. I have always felt that the truck market to us has been just about the same as a wholesale market in a city. These fellows just help to get a cash or F. O. B. price without the freight.

I have seen the trucking business grow from nothing to its present size. I hope it continues. The trucker is a cash buyer and a good buyer. He hauls away a lot of stuff and he will be back next yeear. I believe there should be some regulation of this trucker in my neighborhood. One of these truckers tried to buy our peaches in 1931 for five cents less than I quoted him. I stored them and later sold them for more than I quoted him.

Two years ago we took 3000 bushels of peaches into Washington in one night at a profit. We could not have sold these peaches to anybody in any way. The trucker will pay just as much as he can if he can get rid of them at the other end. I used to ship to a dealer in Johnstown and Altoona who distributed from car to consumer. This dealer tells me that so much fruit comes into his section by truck that now he can hardly handle a single car in a week.

We have not found it hard to sell our better grades by selling the small fruit to the trucker. We have been trying to keep up our car shipments with our best grades of fruit. Our car shipments went further than our trucks went, most of the trucks do not go over 100 miles and usually only 75 miles, which is not up to a car market. We sell most of our cull peaches in Bedford or around the coal regions. If a trucker does take No. 1 stuff, I make him pay wholesale prices for it. We never put No. 2 fruit in car lots of peaches.

From Pennsylvania State Horticultural Society Proceedings, 1933.

SOME TRUCKERS—AND SOME GROWERS

W. H. ESSLINGER, Michigan

I am still against the type and character of some of the sales made direct at the orchard by the grower to the trucker. I do not at this time, nor has it been my ambition in the past to class some of these truckers as dealers. On

the other hand, I cannot bring myself to believe that the grower is not entirely to blame for these undesirable sales. I am now referring to the sale of misrepresented packs, the kind that looks like a $1.00 on the face and oh! what a difference beneath the face. No trucker who is worthy of the name "dealer" will ask for or insist on buying a pack fixed up to cheat somebody, nor will a grower who has the proper interest in the fruit industry put up one of this type. The question is: why do some growers weaken and comply with such demand? My answer is: that they believe they are gaining some easy money. I now ask such growers if they do not realize that to do so places them in the same class as the merchant who short weights or sells cotton good for wool, or gold-filled for solid gold, or a person who knowingly passes counterfeit money, yes, they are even worse than said mentioned merchant, owing to the fact that all good growers and honest packers must suffer also, as such practices destroy confidence on the part of the buying public. Dealers are forced to discount on every purchase in order to protect themselves. My appeal is: do not sell to a trucker at your place any product which is packed differently than one which you would sell direct to your neighbor or friend. Remember that such sales place a dangerous weapon in the hands of an unscrupulous trucker.

From The Mountaineer Grower, News Letter of the West Virginia Horticultural Society, May, 1933.

CROP PROSPECTS

It is still a little early to estimate the fruit crop, but a report of June first will be of interest. In Maryland, there was a general very heavy bloom of both peach and apple. The cool, wet weather and a few nights of below freezing temperature reduced pollination and also caused freezing of blossoms or chilling of the young fruits.

Apples—A general average of about 55 to 60% of a crop seemed in prospect. The crop was so spotty in the various orchards and among varieties, that a good estimate was difficult to figure. Roughly, the variety sets were about as follows:—Light to fair set: Black Twig. Fair to good set: Transparent, Delicious, Jonathan, Rome. Good to heavy set: York, Stayman, Grimes, Winesap, Duchess, Stark. Scab, leaf spot and cedar rust were causing concern among growers, and rosy aphis was rather bad on the Western Shore. Spray burn in varying degrees was in evidence all over the State, no matter whether lead or calcium arsenate were used.

Peaches—In spite of reported freezes, there seemed to be a good prospect for peaches. Orchards varied from no crop, to a full crop, where heavy thinning will be necessary. About a 40 to 50% crop was in prospect, but this is uncertain, due to dropping of fruit that looked good, up until the last week in May. Leaf curl was very serious all over the State, and brown rot was working on twigs and fruit. Some Oriental moth injury was present. Curculio seemed to be scarce, but there was scattered injury and the insects were getting busy.

The weather in various sections at time of bloom and set caused different sets on early and late varieties, so that no attempt will be made to estimate whether there is a large or small crop of early or late peaches.

Prospects are for a lighter crop of pears this year.

This is *not a crop report,* but merely an estimate of conditions and set of fruit as of June 1.

SOMETHING DIFFERENT

We all like to live long, well and happily. We dread disease and try to watch our health, but we are careless in other ways. Last year automobiles caused about 30,000 deaths, and nearly a million other injuries. The economic loss was close to 2 billion dollars a year, four times the fire loss of the country, or just about the cost of running the public schools of the country.

But even more striking are the figures showing that about 24,000 people died last year from home accidents.

What does this have to do with fruit growing? Only this: that we should be more careful about our driving, and should keep our cars and trucks in good repair, especially as regards brakes, steering gear and tires. Not only that, but we should see to it that orchard equipment is in safe condition. This includes good ladders, covered chains and gears on graders, sprayers and dusters. Figures show that rural people have more serious accidents in proportion, than do city workers, and that more of these accidents are fatal. We have to make our own safety on the farm. In the city factories, safety is compulsory. Factory workmen are required to have slightest scratches treated. In the country, where falls from trees, ladders or hay mows, where rusty nails, horse kicks, goring bulls, etc., are ever present to cause trouble, it's a safe plan to be careful, and to treat all injuries carefully and immediately. Think it over. Better be careful or safe now, than sorry later.

Doctor: I diagnose diseases by simply looking in your eye. Why, my friend, I can see in your left eye that you have high blood pressure, stomach ulcers, gall stones and your appendix——"

Patient: Hold on, doc, you're looking in my glass eye. Try looking in the other one.

Every Product Advertised in

"The Maryland Fruit Grower"

is now used in MARYLAND ORCHARDS

Read every Ad and Patronize our Advertisers

IMPORTATION OF UNWRAPPED APPLES TO BE PERMITTED IN THE ARGENTINE

According to recent report, the importation of unwrapped apples in barrels will be permitted in the Argentine this year. Prior to this apples in barrels could only be imported provided they were wrapped in stamped greaseproof paper but under an executive decree this has now been waived.

It is further understood that it will not be necessary in the future for apples to be inspected by Argentine inspectors prior to their exportation from New York as was required the latter part of the season of 1932. Instead the fruit will be inspected in accordance with the existing regulations upon arrival into the Argentine.

From Mary'and State Dept. of Markets News Letter—May 1, 1933.

Don't forget to keep on the look-out for mouse injury.

YOU ARE INVITED

Dr. R. D. Anthony, Acting Secretary of the Pennsylvania Horticultural Association has invited the fruit growers of Maryland to attend the Summer Meeting of the Association to be held at State College, Pa., on Monday August 7 (night) and Tuesday, August 8, 1933. This will be a last opportunity to look over the results of various types of orchard culture in the 25-year-old plots at the College, as the experiments are to be changed after this year. The things to be seen and learned, and the fine scenery enroute will make this a nice trip for both pleasure and profit. Arrange to be there, if possible.

It's thinning time. Thin for better size and color and less culls and tree breakage. Look over the articles on thinning in the May issue of the Maryland Fruit Grower.

Mother: Johnny, go out and cut a dozen peach switches, for I'm going to give you a good whipping.

Johnny: I know a better scheme. I'll get you two armfuls of rocks and let you throw 'em at me.

HAVE YOU READ THE ADVERTISEMENTS?

Get Those First Brood Worms!

THE PROBLEM:

Fruit growers who fail to secure effective control of first brood worms under present residue restrictions face a serious situation. This fact needs no elucidation.

THE ANSWER:

If late spraying is to be avoided, the only practical solution is the elimination of the first brood. This is entirely possible and economical.

THE METHOD:

Bend every effort to stop every first brood worm by the use of the proven most effective control for Codling Moth yet devised—the Lead-oil Combination spray which not only kills the eggs but builds up real protection against worm entrance.

THE MATERIAL:

Formula for one hundred gallons of spray:

Lead Arsenate	2 pounds
Orthol-K	3 quarts
Ortho Spreader	½ pound

WHEN TO SPRAY:

Brood records show that the 27 day (after petal fall), 37 day and 47 day sprays cover the period of heavy first brood worm attack.
Get this all-important protection on in time and keep it there during this period.
Properly planned, this program in no way interferes with effective Scab-control.

Write for Our New Orthol-K Summer Bulletin:

California Spray-Chemical Corporation

214 W. 14th Street **New York, N. Y.**

SUMMER SCALECIDE

The Summer Oil Spray You Have Been Looking For

"Summer Scalecide" can be used before or after sulphur sprays. In fact, "Summer Scalecide" can be combined with some sulphur sprays, such as Sulfocide or wettable sulphur.

"Summer Scalecide" acts as a contact insecticide and spreader in combination with arsenate of lead or calcium arsenate, but does not gum up the fruit at picking time or interfere with washing.

"Summer Scalecide" in combination with bordeaux makes one of the finest bordeaux sprays. A beautiful, smooth coating is obtained which will brush off at the packing house. Write for new leaflet.

SULFOCIDE makes Calcium Arsenate Safer

Much of the burning and difficulties which have arisen with the use of calcium arsenate on apples is because of the attempt to use it in combination with lime sulphur.

When you use calcium arsenate this season combine it with Sulfocide whether you need a fungicide or not. The Sulfocide not only makes calcium arsenate safer but increases the toxicity of the calcium arsenate. Only one gallon of Sulfocide to 200 gallons of spray is needed.

No spreader or lime is necessary.
Sulfocide can be delivered to most Maryland points within forty-eight hours.

B. G. PRATT COMPANY

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